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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/893,943	06/28/2001	Manish S. Prabhu	MS174301.1	6299

27195	7590	02/08/2005

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EXAMINER
HO, ANDY

ART UNIT	PAPER NUMBER
2126	

DATE MAILED: 02/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _10/04/2004_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
   closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-36,38-44,46 and 47_ is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-36,38-44,46 and 47_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
      application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____.

DETAILED ACTION

1. This action is in response to the amendment filed 10/4/2004.

2. Claims 1-36, 38-44 and 46-47 have been examined and are pending in the
application.

Claim Rejections - 35 USC § 112

3. Claim 46 is rejected under 35 U.S.C. 112, second paragraph, as being
indefinite for failing to particularly point out and distinctly claim the subject matter which
applicant regards as the invention.

The applicant recites "The data packet of claim 45" on line 1, which is an
inappropriate dependent because claim 45 has been cancelled. For the purpose of art
rejection, it is interpreted as "The data packet of claim 44" as best understood and as it
appears to be.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-21, 44 and 46-47 are rejected under 35 U.S.C. 103(a) as being
unpatentable over Foley U.S Patent No. 6,487,590.

As to claim 1, Foley teaches a system comprising a remote object manipulator
(an object oriented program running at the remote work station, lines 31-32 column 10)
operable to manipulate a remote object (to control an object associated with the network
element, lines 32-33 column 10; client perform commands to request various
maintenance operations on the network element 38, lines 29-31 column 3).

Foley does not explicitly teach a separated remote object monitor and a lifetime
manager. However, the object oriented program running at the client remote work
station also performs the function of monitoring the remote object (polling for attributes
associated with the network element if the client requests the monitoring of the network
element, changes in attributes are reported when the client requests notification of
changes in attributes, lines 38-45 column 1) and controlling the lifetime of the remote
object (object status information is reported, lines 26-29 column 5; client perform
commands to request various maintenance operations on the network element 38, lines
29-31 column 3). Therefore one of ordinary skill in the art would conclude that the
object oriented program running at the client remote workstation is also the remote
object monitor and the lifetime manager operates to monitor and control the operations
as well as the lifetime of the remote object.

As to claim 2, Foley as modified further teaches the remote object monitor
provide a human readable reference (web browser 30 including the HTML 35 and
applet 32, Fig. 1) to the remote object.

As to claim 3, Foley as modified further teaches the human readable reference
to a remote object codes comprising protocol information (HTML 35, Fig. 1).

As to claim 4, Foley as modified further teaches the human readable reference to a remote object is a URL (HTML 35, Fig. 1).

As to claim 5, Foley as modified further teaches the protocol information is HTTP (HTML 35, Fig. 1).

As to claim 6, Foley as modified further teaches remote object monitor is operable to acquire metadata concerning a remote object (polling for attributes associated with the network element if the client requests the monitoring of the network element, changes in attributes are reported when the client requests notification of changes in attributes, lines 38-45 column 1).

As to claim 7, Foley as modified further teaches the metadata comprises information concerning attributes implemented by a remote object (attributes associated with the network element, lines 38-45 column 1).

As to claim 8, Foley as modified further teaches the remote object monitor provides entry points and process interception to active a custom attribute based process (viewConfig, lines 41-46 column 5; notifyConfig, lines 47-53 column 5; cancelNotify, lines 54-57 column 5).

As to claim 9, Foley as modified further teaches the custom attribute based activated process is performed before non-attribute code (viewConfig, lines 41-46 column 5).

As to claim 10, Foley as modified further teaches the custom attribute based activated process is performed in parallel with non-attribute code (notifyConfig, lines 47-53 column 5).

As to claim 11, Foley as modified further teaches the custom attribute based activated process is performed after non-attribute code (cancelNotify, lines 54-57 column 5).

As to claim 12, it is a system claim of claims 9-11. Therefore, it is rejected for the same reasons as claims 9-11 above.

As to claim 13, Foley as modified further teaches the remote object monitor and the lifetime manager are implemented within a single component (an object oriented program running at the remote work station, lines 31-32 column 10).

As to claim 14, Foley as modified further teaches the lifetime manager employs a lease manager (application-specific service object, lines 9-10 column 5) to monitor the lifetime of the remote object.

As to claim 15, it is a system claim of claims 2, 6, 8 and 13. Therefore, it is rejected for the same reasons as claims 2, 6, 8 and 13 above.

As to claim 16, Foley as modified further teaches the remote object manipulator update metadata (startUpdate, lines 16-25 column 6) associated with a remote object.

As to claims 17-19, they are system claims of claims 7 and 13-14, respectively. Therefore, they are rejected for the same reasons as claims 7 and 13-14 above.

As to claim 20, it is a system claim of claims 16 and 18. Therefore, it is rejected for the same reasons as claims 16 and 18 above.

As to claim 21, it is a computer readable medium claim of claim 1. Therefore, it is rejected for the same reasons as claim 1 above.

As to claim 44, it is a system claim of claims 1-2. Therefore, it is rejected for the same reasons as claims 1-2 above. Foley as modified further teaches a data packet (client requests, line 42 column 1) is transmitted between components (client and network, lines 38-43 column 1) comprising a field that stores information associated with a human readable reference (web browser 30 including the HTML 35 and applet 32, Fig. 1) to a remote object (to control an object associated with the network element, lines 32-33 column 10; client perform commands to request various maintenance operations on the network element 38, lines 29-31 column 3).

As to claim 46, it is a system claim of claim 8. Therefore, it is rejected for the same reasons as claim 8 above.

As to claim 47, it is a system claim of claims 1, 7-8 and 40. Therefore, it is rejected for the same reasons as claims 1, 7-8 and 40 above.

5. Claims 22-29, 31-36 and 40-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Foley in view of Bainbridge U.S Patent No. 6,014,700.

As to claim 22, it is a system claim of claims 1-2, 8 and 13. Therefore, it is rejected for the same reasons as claims 1-2, 8 and 13 above. Foley does not explicitly teach an object reference extender. Bainbridge teaches a client/server object oriented programming system (object-oriented client/server computing environment, line 32 column 3) wherein an object reference extender extend an object reference class subclassed from a base class object reference class (forming an extended object reference based on said request, said extended object reference having, in addition to a

server address field and an object key field, at least one additional field, lines 38-41 column 3; lines 43-64 column 5). It would have been obvious to apply the teachings of Bainbridge to the system of Foley because by extending the object reference, a client request can be serviced directly by the specified server without going through a routing server as disclosed by Bainbridge (lines 56-64 column 5).

As to claims 23-24, they are system claims of claims 3 and 5, respectively. Therefore, they are rejected for the same reasons as claims 3 and 5 above.

As to claim 25, Bainbridge further teaches the object reference extender overrides a field (overriding fields 313a and 314a to 313b and 314b, Fig. 3A and 3B; lines 22-53 column 6).

As to claim 26, Bainbridge further teaches the object reference extender adds a field (additional field, lines 40-41 column 3).

As to claims 27-28, they are system claims of claims 12 and 14, respectively. Therefore, they are rejected for the same reasons as claims 12 and 14 above.

As to claim 29, it is a system claim of claims 13-14. Therefore, it is rejected for the same reasons as claims 13-14 above.

As to claim 31, it is a computer readable medium claim of claim 22. Therefore, it is rejected for the same reasons as claim 22 above.

As to claim 32, it is a method claim of claim 22. Therefore, it is rejected for the same reasons as claim 22 above.

As to claim 33, it is a method claim of claims 3-4. Therefore, it is rejected for the same reasons as claims 3-4 above.

As to claim 34, it is a method claim of claims 25-26. Therefore, it is rejected for the same reasons as claims 25-26 above.

As to claim 35, it is a method claim of claims 25-26. Therefore, it is rejected for the same reasons as claims 25-26 above.

As to claim 36, it is a method claim of claim 25. Therefore, it is rejected for the same reasons as claim 25 above.

As to claim 40, it is a method claim of claims 8-11. Therefore, it is rejected for the same reasons as claims 8-11 above.

As to claim 41, it is a method claim of claims 32, 35, 37 and 40. Therefore, it is rejected for the same reasons as claims 32, 35, 37 and 40 above.

As to claim 42, it is a computer readable medium claim of claims 32, 35, 37 and 40. Therefore, it is rejected for the same reasons as claims 32, 35, 37 and 40 above.

6.   Claims 30, 38-39 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Foley in view of Bainbridge, and further in view of King U.S Patent No. 6,681,263.

As to claim 30, Foley as modified does not explicitly teach a garbage collector. King teaches a system of controlling the lifetime of an object (lines 53-58 column 2) wherein a garbage collector is assigned to deletes an object is no longer being used by the client (the garbage collector examines objects to determine whether there are any remaining references from clients to that object; when all of those references have been released, the garbage collector deletes the object, lines 38-42 column 2). It would have

been obvious to apply the teachings of King to the system of Foley as modified because

by employing a garbage collector, the lifetime of the object could be closely monitored

such as the garbage collector deletes the object when the object's lifetime is ended as

disclosed by King (lines 38-42 column 2).

As to claim 38, it is a method claim of claim 30. Therefore, it is rejected for the

same reasons as claim 30 above. King further teaches establishing a lease for the

remote object (start an object, acquire interface pointers to the object's interfaces, lines

37-40 column 1); renewing the lease when the remote object is accessed (lines 49-57

column 1).

As to claim 39, it is a method claim of claim 30. Therefore, it is rejected for the

same reasons as claim 30 above.

As to claim 43, it is a system claim of claims 8, 22 and 30. Therefore, it is

rejected for the same reasons as claims 8, 22 and 30 above.

Response to Arguments

7. Applicant's arguments filed 10/4/204 have been fully considered but they are

not persuasive.

Applicant argued that Foley does not teach a lifetime manager controls the

lifetime of a remote object (Remarks, last paragraph page 12). In response, as

disclosed in the claim rejection above, the object oriented program running at the client

remote work station also performs the function of controlling the lifetime of the remote

object (object status information is reported, lines 26-29 column 5; client perform

commands to request various maintenance operations on the network element 38, lines 29-31 column 3). As disclosed, since the object is closely monitored by the system such that the client performs commands to request various maintenance operations on the object based on the object status information, therefore the lifetime of the object is being controlled by the system. The reference meets the limitation as claimed.

Applicant argued that King does not teach a lease manager (Remarks, last paragraph page 15). In response, Foley reference was used to teach this limitation, not King reference.

Applicant argued that the examiner did not provide a motivation to combine King reference with Foley reference as modified (Remarks, first complete paragraph page 16). In response, note the discussion of claim 30 above for a newly added motivation of combining references.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to The Thanh Ho whose telephone number is (571) 272-3762. A voice mail service is also available for this number. The examiner can normally be reached on Monday – Friday, 8:30 am – 5:00 pm.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Any response to this action should be mailed to:

Commissioner for Patents

P.O Box 1450

Alexandria, VA 22313-1450

Or fax to:

- AFTER-FINAL faxes must be signed and sent to (703) 872 - 9306.

- OFFICAL faxes must be signed and sent to (703) 872 - 9306.

- NON OFFICAL faxes should not be signed, please send to (571) 273 – 3762

TTH
January 27, 2005

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